

Abstract

A lens structure for use with an ion beam implanter. The lens structure includes first and second electrodes spaced apart along a direction of ion movement. The lens structure extends on opposite sides of a beam path across a width of the ion beam for deflecting ions entering the lens structure. The lens structure include a first electrode for decelerating ions and a second electrode for accelerating the ions to cause ions entering the lens structure to exit said lens structure with approximately the same exit trajectory regardless of the trajectory ions enter the lens structure. In an alternate construction the lens structure can include a first electrode for accelerating ions and a second electrode for decelerating ions.